subset of patients. In recent years, fQRS is being evaluated as a prognostic marker in different patient population, not only in coronary artery disease, but also in Brugada syndrome, long QT syndrome, Arrhythmogenic right ventricular dysplasia and cardiac sarcoidosis. Determination of prognosis is an important issue in management of acute coronary syndrome patients. So we planned to evaluate the significance of fQRS in standard surface ECG for determining prognosis.

Methods: This study was done among admitted patients with acute coronary syndrome in IPGMER, Kolkata, from November 2012 to May 2014.INCLUSSION CRITERIA-Patients presented first time with acute coronary syndrome, above 18 years of age, both male and female. EXCLUSION CRITERIA-1.Associated major other comorbidies like malignancy, severe liver disease, end stage renal failure, cerebrovascular accident, sepsis etc guarding the prognosis.2.Patients who are unable to follow-up.3.Patients with previous history of acute coronary syndrome. Every patient was followed up for a period of 6 months.

Results: A total number of 256 patients (Male:Female = 163:45) were included. As 48 patients were lost to follow up, 208 subjects were analyzed. Among them total 102 patients (Male:Female = 78:24) had fQRS in their ECG. Multivariate analysis showed that presence of fQRS predicts mortality (HR- 1.62, 95% C.I.-1.89-2.38, P<0.01) independently. Moreover, cardiac events also occurred significantly higher in patients with fQRS (HR- 7.16, 95% C.I.-3.17-20, P<0.01).

Conclusion: fQRS is an independent predictor of mortality and adverse cardiac events in ACS patients.

Coronary artery disease and the distressed personality (TYPE D)

P. Mittal, C.M. Varma, R. Thakur, R.P.S. Bhardwaz, M. Ahmad, R.K. Bansal, U. Pandey, S.K. Sinha, P. Kumar

Department of Cardiology, LPS Institute of Cardiology, Kanpur, India

Background: During the past decade studies have shown that Type D personality is associated with increased risk of cardiac events, mortality and poor quality of life. In this study we assessed potential association between type D personality and CAD and the relative contribution of various risk factors in this association.

Methods: The sample consisted of non-consecutive case series of 150 patients with clinically diagnosed and angiographically confirmed coronary artery disease (CAD), who had been admitted to the LPS institute of cardiology, Kanpur , from Aug 2013 to Jan 2014. The patients were assessed by the Type-D scale (DS14) questionnaire. Risk factors for CAD were also assessed.

Results: By applying the recommended cut-off (NA ≥10 and SI≥10), we found that 47/150 (31.3%) patients could be classified as Type D personality. we found no sex and age differences in the Type D personality patients. Type D personality patients had significantly higher incidence of UA and myocardial infarction along with some components of metabolic syndrome (i.e hypercholesterolemia, hypertriglyceridemia and hypertension) and not diabetes mellitus.

Conclusion: We have found that the prevalence of Type D personality in patients with CAD is in concordance with the other studies. Furthermore, patients with type D personality reported a significantly higher frequency of some components of metabolic syndrome (i.e. hypercholesterolemia, hypertriglyceridemia and hypertension) as well as higher ACS events.

Role of Tissue Doppler echocardiography (TDI) in the diagnosis of CSA as an adjunct to treadmill testing (TMT)

Gaurav Singhal, C.M. Verma, R. Thakur, R.P.S. Bhardwaj, M. Ahmad, R.K. Bansal, U. Pandey, S.K. Sinha, P. kumar

LPS Institute of Cardiology, Kanpur, India

Aims and Objectives: To determine if Tissue Doppler echocardiographic imaging (TDI) performed at rest in patients with suspected stable angina pectoris (CSA) is able to predict the presence of significant coronary artery disease (CAD).

Materials and Methods: The study comprised of 400 consecutive patients with clinically suspected CSA, no previous cardiac history, and a normal ejection fraction. All patients were examined by echocardiography with TDI, exercise treadmill testing(TMT), and coronary angiography (CAG). Regional longitudinal systolic (s′), early diastolic (e′), and late diastolic (a′) and mitral inflow E and A myocardial velocities were measured by colour TDI at mitral annular sites and averaged to provide global estimates. Duke score (DS) was used as the outcome of the exercise ECG. Patients with an area stenosis of ≥70% in at least one epicardial coronary artery were categorized as having a significant CAD.

Observation and Results: Patients with significant CAD(n = 170) were compared with patients without significant CAD (n = 230).TDI revealed diastolic dysfunction by decreased e′ , reversed E/A ratio and increased E/e′ and systolic dysfunction by reduced s′ in patients of CAD. Both e′ [odds ratio (OR): 1.5 (1.1–1.9, P <0.01) per cm/s decrease] and s′ [OR: 1.7 (1.1–2.5, P <0.05) per cm/s decrease] remained independent predictors of CAD after multivariable adjustment for baseline, exercise ECG, and conventional echocardiographic parameters. Area under the receiver operating characteristic curve (AUC) for exercise ECG and TDI in combination was significantly higher than AUC for exercise ECG alone (0.84 vs. 0.79, P <0.01).

Conclusion: In patients with clinically suspected CSA Echocardiography with TDI performed at rest helps in better prediction of significant CAD than conventional echocardiography by demonstration of reduced s′and e′ velocities and increased E/e′ ratio and reversed MV E/A ratio, and colour TDI improves the diagnostic performance of exercise treadmill test.

Angiotensin-converting enzyme gene insertion/deletion polymorphism in Indian patients with myocardial infarction

C. Anbarasan, M. Bavanilatha, N. Radhakrishnan, S. Vijayakumar, K. Latchumanadhas, S. Ajit Mullasari

Department of Cardiology, Madras Medical Mission, Institute of Cardiovascular Diseases, Chennai, India
Department of Biotechnology, Sathyabama University, Chennai, India

Introduction: The objective of the study is to test the association of the angiotensin-converting enzyme gene insertion/deletion (I/D) polymorphism with myocardial infarction (MI).

Methods: This study comprised 50 Indian myocardial infarction cases with an age range from 35-60 years including 40 males and 10 females, plus 20 healthy unrelated individuals of nearly matched age and sex as a control group. For all subjects, genomic DNA testing for the angiotensin-converting enzyme gene